In the claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) A signal processor comprising a plurality of channels, each channel configured to receive an input signal stream, to reduce the signal to a direct current signal and to process the signal according to the stream signal, each channel having a plurality of low pass filters configured to filter in-phase and quadrature-phase modulator outputs with at least a first low pass filter and to filter [[a]] reference quadrature signals with at least a second low pass filter, and a gain control configured to re-modulate filtered gain adjusted output signals with the filtered reference quadrature signals, the processor including an inverter to invert the ~~in-phase~~ filtered in-phase reference signal to multiply the ~~quadrature~~ gain adjusted quadrature-phase output signal, and an output configured to output a modulated output signal.

2. (currently amended) A signal processor according to Claim 1, wherein each channel includes an oscillator configured to establish [[the]] a center of [[the]] a bandpass of the channel.

3. (currently amended) A signal processor according to Claim 1, wherein each channel includes a gain input configured to receive a gain signal used to attenuate the ~~channel~~ signal.

4. (currently amended) A method of processing an input signal by correlating the input signal with quadrature sources, comprising:

receiving an input signal and modulating [[it]] the input signal with reference quadrature signals of a quadrature sinusoidal source operating at [[the]] a center frequency of a desired pass band,

filtering in-phase and quadrature-phase modulator outputs with at least a first low pass filter,

filtering the reference quadrature signals with at least a second low pass filter,

adjusting the amplitude of the filtered in-phase and quadrature-phase modulator outputs with a gain controlling circuit or multiplier,

re-modulating the gain adjusted output signals by the filtered reference quadrature signals using the ~~quadrature~~ filtered quadrature-phase reference signal to multiply the ~~in-phase~~ gain

adjusted in-phase output signal and using an inverted version of the ~~in-phase~~ filtered in-phase reference signal to multiply the ~~quadrature~~ gain adjusted quadrature-phase output signal,

summing the resulting two outputs to generate an output.

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